

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Bruce *et al.* Confirmation No.: Not yet assigned
Appl No.: Not yet assigned Group Art Unit: Not yet assigned
Filed: Filed Concurrently Herewith Examiner: Not yet assigned
For: MAIZE METALLOTHIONEIN GENE AND PROMOTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT
CITATION UNDER 37 C.F.R. § 1.97

Attached is a list of documents on form PTO-1449.

It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 C.F.R. § 1.97 and Section 609 of the MPEP. By submitting the listed documents, Applicant in no way makes any admission as to the prior art status of the listed documents, but is instead submitting the listed documents for the sake of full disclosure.

Any foreign patents or non-patent literature documents items are attached, except those that were supplied in, or cited by the Office during prosecution of, parent Application No. 09/520,268 filed March 7, 2000. Since the benefit of this application was claimed under 35 U.S.C. 120, no copies need to be furnished in accordance with 37 C.F.R. 1.98(d); however, copies will be furnished on request.

Respectfully submitted,

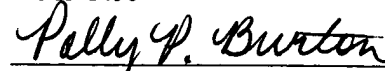


W. Murray Spruill
Registration No. 32,943

Customer No. 29122
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Raleigh Office (919) 862-2200
Fax Raleigh Office (919) 862-2260

"Express Mail" mailing label number EV 184330562 US
Date of Deposit November 12, 2003

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450


Polly P. Burton

| Substitute for form 1449/PTO (Revised 04/2003) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete if Known | | |
|--|------------------|---|--------------------------------|--|--|--|
| | | | | Application Number | Not yet assigned | |
| | | | | Filing Date | Filed Concurrently Herewith | |
| | | | | First Named Inventor | Bruce | |
| | | | | Group Art Unit | Not yet assigned | |
| Examiner Name | Not yet assigned | | | | | |
| Sheet | 1 | of | 3 | Attorney Docket Number | 035718/271431 | |
| U. S. PATENT DOCUMENTS | | | | | | |
| Examiner Initials* | Cite No. | Document Number Number - Kind Code (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear | |
| | 1 | US-5,466,785 | 11-14-1995 | De Framond | | |
| | 2 | US-5,608,144 | 03-04-1997 | Baden, <i>et al.</i> | | |
| | 3 | US-5,785,735 | 07-28-1998 | Raskin <i>et al.</i> | | |
| | 4 | US-5,837,848 | 11-17-1998 | Ely <i>et al.</i> | | |
| | 5 | US-5,981,840 | 11-09-1999 | Zhao <i>et al.</i> | | |
| FOREIGN PATENT DOCUMENTS | | | | | | |
| Examiner Initials | Cite No. | Foreign Patent Document Country Code - Number Kind Code (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | English Language Translation Attached |
| | 6 | JP 05192172 | 08-03-1993 | SUMITOMO CHEM CO LTD | 33-38 | |
| | 7 | WO 94/21793 | 09-29-1994 | MARCO, Y. | 33-35 | |
| | 8 | WO 97/38106 | 10-16-1997 | MAY, G. | 33, 35, 37-38 | |
| | 9 | WO 99/42587 | 08-26-1999 | GREENLAND, A. | 33, 35-38 | |
| | 10 | WO 99/43819 | 09-02-1999 | PIONEER HI BRED INTERNATIONAL, INC. | 33, 35-38 | |
| | 11 | WO 99/50427 | 10-07-1999 | THOMPSON, R. | 33, 35-38 | |
| | 12 | WO 00/15812 | 03-23-2000 | NISSAN CHEMICAL IND LTD | 33-38 | |
| OTHER DOCUMENTS | | | | | | |
| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | | English Language Translation Attached |
| | 13 | CAPONE, I., <i>et al.</i> , "Expression in Different Populations of Cells of the Root Meristem is Controlled by Different Domains of the <i>rolB</i> Promoter," <i>Plant Molecular Biology</i> , 1994, pp. 681-691, Vol. 25. | | | | |
| | 14 | CHEVALIER, C. <i>et al.</i> , "Molecular Cloning and Characterization of Six cDNAs Expressed During Glucose Starvation in Excised Maize (<i>Zea Mays</i> L.) Root Tips," <i>Plant Molecular Biology</i> , 1995, pp. 473-485, Vol. 28. | | | | |
| Examiner Signature | | | | Date Considered | | |

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449/PTO
(Revised 04/2003)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

| | |
|------------------------|-----------------------------|
| Application Number | Not yet assigned |
| Filing Date | Filed Concurrently Herewith |
| First Named Inventor | Bruce |
| Group Art Unit | Not yet assigned |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 035718/271431 |

OTHER DOCUMENTS

| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | English Language Translation Attached |
|----------------------|-------------|---|--|
| | 15 | De FRAMOND, A., "A Metallothionein-Like Gene From Maize (Zea Mays) Cloning and Characterization," <i>Federation of European Biochemical Societies</i> , 1991, pp. 103-106, Vol. 290(1.2). | |
| | 16 | EVANS, I., <i>et al.</i> , "A Gene From Pea (Pisum Sativum L.) with Homology to Metallothionein Genes," <i>Federation of European Biochemical Societies</i> , 1990, pp. 29-32, Vol. 262(1). | |
| | 17 | GODDEMEIER, M., <i>et al.</i> , "Root-Specific Expression of a Zea Mays Gene Encoding a Novel Glycine-Rich Protein, zmGRP3," <i>Plant Molecular Biology</i> , 1998, pp. 799-802, Vol. 36. | |
| | 18 | HERTIG, C., <i>et al.</i> , "Sequence and Tissue-Specific Expression of a Putative Peroxidase Gene from Wheat (Triticum Aestivum L.)," <i>Plant Molecular Biology</i> , 1991, pp. 171-174, Vol. 16. | |
| | 19 | HSIEH, H., <i>et al.</i> , "Promoter Structure and Activity of Type I Rice Metallothionein-Like Gene," <i>The Journal of Sequencing and Mapping</i> , 1998, pp. 9-18, Vol. 9(1). | |
| | 20 | HSIEH, H., <i>et al.</i> , "A Novel Stress-Inducible Metallothionein-Like Gene From Rice," <i>Plant Molecular Biology</i> , 1995, pp. 381-389, Vol. 28. | |
| | 21 | HUDSPETH, R., <i>et al.</i> , "Characterization and Expression of Metallothionein-Like Genes in Cotton," <i>Plant Molecular Biology</i> , 1996, pp. 701-705, Vol. 31. | |
| | 22 | LI, H., <i>et al.</i> , "Novel Strategy Yields Candidate Gsh-1 Homeobox Gene Targets Using Hypothalamus Progenitor Cell Lines," <i>Developmental Biology</i> , 1999, pp. 64-76, Vol. 211. | |
| | 23 | LIPSHUTZ, R.J., <i>et al.</i> , "High Density Synthetic Oligonucleotide Arrays," <i>Nature America Inc.</i> , 1999, pp. 20-24, Vol. 21. | |
| | 24 | LOHMER, S., <i>et al.</i> , "The Maize Regulatory Locus Opaque-2 encodes a DNA-Binding Protein Which Activates the Transcription of the B-32 Gene," <i>The EMBO Journal</i> , 1991, pp. 617-624, Vol. 10(3). | |
| | 25 | LUSCHNIG, C., <i>et al.</i> , "EIR1, A Root-Specific Protein Involved in Auxin Transport, is Required for Gravitropism in Arabidopsis Thaliana," <i>Genes and Development</i> , 1998, pp. 2175-2187, Vol. 12. | |
| | 26 | MASUDA, S., <i>et al.</i> , "cDNA Cloning of a Novel Lectin-Like Xylem Sap Protein and Its Root-Specific Expression in Cucumber," <i>Plant Cell Physiol.</i> , 1999, pp. 1177-1181, Vol. 40(11). | |
| | 27 | NEWTON, K., <i>et al.</i> , "Evidence for a Novel Mitochondrial Promoter Preceding the Cox2 Gene of Perennial Teosintes," <i>The EMBO Journal</i> , 1995, pp. 585-593, Vol. 14(3). | |
| | 28 | ROBINSON, N.J., <i>et al.</i> , "Plant Metallothioneins," <i>Biochem. J.</i> , 1993, pp. 1-10, Vol. 295. | |
| | 29 | TAKAHASHI, Y., <i>et al.</i> , "Characterization of the Auxin-Regulated Par Gene From Tobacco Mesophyll Protoplasts," <i>The Plant Journal</i> , 1991, pp. 327-332, Vol. 1(3). | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|-------------|---|---|--------------------------|--|
| Substitute for form 1449/PTO (Revised 04/2003) | | | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Application Number | Not yet assigned |
| | | | | Filing Date | Filed Concurrently Herewith |
| | | | | First Named Inventor | Bruce |
| | | | | Group Art Unit | Not yet assigned |
| | | | | Examiner Name | Not yet assigned |
| Sheet | 3 | of | 3 | Attorney Docket Number | 035718/271431 |
| OTHER DOCUMENTS (Cont'd.) | | | | | |
| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | English Language Translation Attached |
| | 30 | TAKAHASHI, Y., <i>et al.</i> , "Location of the Cis-Acting Auxin-Responsive Region in the Promoter of the Par Gene From Tobacco Mesophyll Protoplasts," <i>Proc. Natl. Acad. Sci.</i> , 1990, pp. 8013-8016, Vol. 87. | | | |
| | 31 | VERDAGUER, <i>et al.</i> , "Functional Organization of the Cassava Vein Mosaic Virus (CsVMA) Promoter," <i>Plant Molecular Biology</i> , 1998, pp. 1055-1067, Vol. 37. | | | |
| | 32 | XU, Y., <i>et al.</i> , "Characterization of a Rice Gene Family Encoding Root-Specific Proteins," <i>Plant Molecular Biology</i> , 1995, pp. 237-248, Vol. 27. | | | |
| | 33 | YAMAMOTO, Y.T., <i>et al.</i> , "Characterization of CIS-Acting Sequences Regulating Root-Specific Gene Expression in Tobacco," <i>The Plant Cell</i> , 1991, pp. 371-382, Vol. 3. | | | |
| Examiner Signature | | | | | Date Considered |

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.